

CLAIMS

- 1 1. A method comprising
2 in a cell of a cellular wireless communication system,
3 altering the SIR of at least one user in a sector of the cell by
4 temporarily reducing transmissions on a forward link in at least
5 one other sector of the cell or a sector in another cell in accordance
6 with a pattern.
- 1 2. The method of claim 1 in which the pattern is organized in
2 a sequence of time slots and the pattern defines which of the
3 sectors has transmissions turned on or off in each of the time slots.
- 1 3. The method of claim 1 in which the pattern comprises a
2 predetermined fixed pattern that is repeated as time passes.
- 1 4. The method of claim 1 also including
2 determining a current state of transmissions in at least one
3 of the sectors of the cell or a sector in another cell, and
4 setting the pattern dynamically based on the determined
5 state of the transmissions.
- 1 5. The method of claim 4 in which the current state of
2 transmissions includes the scheduling status of transmissions in
3 neighboring sectors in the cell or in one or more other cells
- 1 6. The method of claim 5 in which the current state of
2 transmissions includes the transmission rates of some neighbor
3 sectors.

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- 1 7. The method of claim 4 in which the current state of
2 transmissions includes the next time slot usage.
- 1 8. The method of claim 4 in which the current state of
2 transmissions includes the forward link SIR.
- 1 9. The method of claim 4 in which the current state of
2 transmissions includes user location.
- 1 10. The method of claim 4 in which the current state of
2 transmissions includes a fairness setting.
- 1 11. The method of claim 4 in which the current state of
2 transmissions includes an application type of user or QoS.
- 1 12. The method of claim 1 in which temporarily reducing the
2 transmissions comprises turning transmissions on and off in
3 selected sectors according to the pattern.
- 1 13. The method of claim 12 in which the pattern includes
2 turning off transmissions in other sectors more frequently to help
3 users having lower communication rates.
- 1 14. The method of claim 1 also including arranging a
2 frequency reuse factor of one or higher in the wireless system.
- 1 15. The method of claim 1 in which the wireless system
2 comprises 1xEV-DO.
- 1 16. Apparatus comprising
2 wireless transmission facilities for more than one sector of
3 a cell, and

4 control facilities connected to the wireless transmission
5 facilities and configured to alter the SIR of at least one user in a
6 sector of the cell by temporarily reducing transmissions on a
7 forward link in at least one other sector of the cell or a sector in
8 another cell in accordance with a pattern.

1 17. The apparatus of claim 16 in which the control facilities
2 comprise sector controllers for controlling the wireless
3 transmission facilities for the respective sectors.

1 18. A medium bearing intelligence configured to enable a
2 machine to effect the actions that comprise:

3 in a cell of a cellular wireless communication system,
4 altering the SIR of at least one user in a sector of the cell by
5 temporarily reducing transmissions on a forward link in at least
6 one other sector of the cell or a sector in another cell in accordance
7 with a pattern.

1 19. Apparatus comprising
2 a sector controller adapted to control transmissions in a
3 sector of a cell of a wireless communication system and to
4 communicate with other sector controllers in the cell or in one or
5 more other cells to coordinate the turning on and off of
6 transmissions in at least one of the sectors based on the
7 transmission state in at least another one of the sectors.

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